Mississippi State University Department of Poultry Science Hatch Out Program



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Incubator Operation

The incubator is the most important tool for having a successful hatch out. A room with temperature ranging from 70 to 75 degrees Fahrenheit, and fresh air (without drought) is ideal. Be sure that there is not direct sunlight coming in contact with the incubator and that it is in a flat and level position. Place incubator away from fans, heaters, and air conditioners in a position that air can move freely. Be sure to plug the outlet into the component labeled "Power Supply".



Make sure that the incubators temperature is between 99 - 100 degrees. Preferably 99.5. (The temperature should be set to the correct temperature) The temperature will be displayed on the top of the incubator. The humidity should also be around 55-60% as displayed on the top of the incubator next to the temperature.

There is also a candler at the top of the incubator. Push the "minus or dash" button in order to turn it on. Place the large end of an egg to the light source in order to candle or see the inside of the egg.



Keep water in the incubator at all times. Water is needed to help maintain a relative humidity in the incubator. Fill the water reservoir on the outside of the incubator to the top of the two posts.

MAKE SURE THAT THE GREY COVER IS OVER THE WATER RESERVOIR INSIDE THE INCUBATOR.



*Turning the eggs during the last few days of incubation is NOT NECESSARY.

Awaiting the Hatch of Chicks

After noticing some of the eggs hatch, it is a good idea to go ahead and have the lamp turned on and heating the litter of the brooder box (aquarium). This will assure that once the chicks are moved into it, they will not get cold and lose body heat. Just make sure that chicks have completely fluffed out before moving them. If chicks are still slightly wet before leaving for the day leave them in the incubator and transfer them to the aquarium when returning in the morning. Chicks absorb their yolk sack prior to hatch, therefore they are supplied with nutrients for up to 48 hours following hatch.



This is an example of a chick who is still wet and not completely fluffed.

Setup for Birds Once They Hatch

An aquarium should have been included along with your incubator and eggs. Included in this aquarium are some useful items that will help you to care for the birds until pick-up. Items included are: heating lamp, extra bulb, feed trough, starter feed, water trough, and litter.



What to do with Hatched Eggs

Once birds have hatched and are completely fluffed, they can now be moved to the aquarium that is heated by a heat lamp and contains food and fresh water for them to drink.

Don't forget to preheat aquarium before placing birds in it.





After Birds are put in Aquarium

Once the chicks have been placed into the brooder box aquarium, you can help them out by being sure chicks have enough feed and water and that they are not too cold or too hot. If chicks are too hot they will be spread out away from the lamp and panting. If they are too cold they will be huddled together. Another method for determining if chicks are comfortable and happy is by their level of noise. Chicks should not be noisy if they are comfortable. In order to adjust temp raise or lower lamp accordingly. The litter in the aquarium can be stirred to eliminate any smells and to bring the fresh to the surface. Make sure that the heat lamp is on and running properly at all times.

What to do with Incubator after Hatch

After all of the hatched chicks have been put into the aquarium, you can clean up the incubator by removing any un-hatched eggs. **NOTE: Please make sure that all birds are ready to be moved to the aquarium and that you have allowed enough time for the other eggs to hatch.** Not all of the eggs will hatch on day 21. If they have not hatched by day 23, they should be discarded and placed into a plastic Ziploc bag and can be discarded in the trash along with all the shells.

Be sure to remove any water that may be in the incubator. All hatched egg shells can also be put into a Ziploc or can be disposed into a trash can.

What to do prior to pick up

Please place all un-hatched eggs and any dead chicks into a plastic Ziploc bag. (All eggs that are going to hatch should be hatched by days 23 which is generally Thursday of your hatch week.)

Prior to pick up please have the items together ready to go. Make sure that the incubator has been cleaned out and that the un-hatched are discarded of.

*You are more than welcome to keep the chicks. If you are planning on keeping the chicks, please make sure they are removed from the aquarium by pick up time. Also please be sure to clean out the aquarium (litter can be thrown in the trash). ALL EQUIPMENT MUST BE RETURNED!!

Have students prepare questions for Friday seminar.

Tips and Tricks

- Write questions down that students may have on board or sheet and have representative answer them on Friday at pick up.
- Always keep feed and water available for chicks.
- Incubator temperature should always be between 99-100 degrees Fahrenheit.
- Always keep water in incubator reservoir during hatch period.
- Clean incubators and aquariums (if keeping chicks) on Thursday afternoon prior to pick-up.
- Utilize curriculum, lesson plans, activities, and powerpoints.
- Don't forget to have fun!!!
- For questions contact Jessica Wells (<u>j.wells@msstate.edu</u> or 662-769-9744)



Reminders

- Make sure all teachers who are participating in the hatchout program are available at time of pick up and drop off.
- Make sure to warm aquarium by turning on the light when chicks start hatching.
- Make sure chick is completely fluffed before moving from incubator to aquarium.
- Once there are chicks, make sure the light is on at ALL times.
- Pick up time on Friday will be around the same time as drop off on Monday.
- Prior to pickup be sure all equipment is cleaned out. If chicks are going back to MSU the aquariums do not have to be cleaned.
- Prior to pickup be sure all activities are together, packed, and ready to go.
- Be sure to return all activity items!! Except the Tuesday activity and the starburst from the Thursday activity.

